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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,802	10/30/2001	Carol Ivash Gabele	AUS920010960US1	9640
28722	7590	05/11/2005	EXAMINER	
BRACEWELL & PATTERSON, L.L.P. P.O. BOX 969 AUSTIN, TX 78767-0969			BRODA, SAMUEL	
			ART UNIT	PAPER NUMBER
			2123	
DATE MAILED: 05/11/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/997,802	Applicant(s) GABELE ET AL	
	Examiner Samuel Broda	Art Unit 2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>30 October 2001</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. Claims 1-21 have been examined.

Drawings

2. Applicants' formal drawings have been reviewed and approved.

Specification

3.1 The disclosure is objected to because of the following informalities: the references to related co-pending Applications are now obsolete and require updating to reflect current application serial numbers and/or patent numbers. Additionally, references to internal docket numbers must be removed.

3.2 The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicants' cooperation is requested in correcting any errors of which Applicants may become aware in the specification.

Claim Rejections - 35 U.S.C. § 112, Second Paragraph

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4.1 Claims 6-7, 13-14, and 20-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

4.2 Regarding claim 6, this claim is dependent on independent claim 1. In claim 1, a “digital signature” is computed “within said instrumentation server.” However in claim 6, “said digital signature” is found within “said simulation client.” It is unclear if Applicants intend the reference in claim 6 to the “digital signature” to be to the same “digital signature” in claim 1 because the claim language does not appear to indicate:

- a. if the digital signatures are the same, how the digital signature is transferred from the server to client; or
- b. if the digital signatures are created separately, how a second digital signature is calculated by the client.

on lines 15-16 is meant to refer to the limitation appearing on line 9.

4.3 Regarding claim 7, this claim is rejected based on its dependency to claim 6.

4.4 Regarding claims 13-14 and 20-21 are rejected under 35 U.S.C. 112, second paragraph, using the analysis of claims 6-7.

Claim Rejections - 35 U.S.C. § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5.1 Claims 1-5, 8-12, and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Housel et al, "WebExpress: A Client/Intercept Based System for Optimizing Web Browsing in a Wireless Environment," Mobile Networks and Applications 3, pp. 419-431 (1998).

5.2 Regarding claims 1-5, Housel et al teaches a caching method between a client and server using a "Client Side Intercept" ("CSI") and "Server Side Intercept" ("SSI") using cyclic-redundancy-check digital signatures to associate files send from the server to the browser. See page 424, Fig. 4.

According to Housel et al, as part of a protocol to determine whether a fresh object (or page) must be fetched from the server, the CSI requests that the SSI verify that that the object has not changed. If the object has changed, based on the CRC comparison, the SSI indicates to the SSI that the object is out of date. See page 424 column 1 paragraph 2 through column 2 paragraph 2.

Additionally, the method of Housel et al is useful for CGI ("Common Gateway Interface") processing corresponding to executing programs from Web browsers. The method of Housel et al permits a type of "differencing technology" to optimize CGI processing. See page 425, Figs. 5-6. According to Housel et al at page 425 column 1 paragraph 4, the differencing

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technique is “based on the observation that *different replies from the same program (application server) are usually very similar.*” (Italics in original.) The methods of Housel et al permit the running of web applications at the client that reduce the amount of data sent and the response time. See page 428 column 1 Section “8. Usage Scenarios and Results” and page 429 Table 1.

Regarding claims 1-5, it would have been obvious to one of ordinary skill in the art at the time of Applicants’ invention to adapt the digital signature and caching and differencing methods of Housel et al to a simulation farm, because the resulting client/server setup would easily catch inconsistencies between simulation data at the server with simulation data at the client and would permit decreased data transfer.

5.3 Regarding claims 8-12 and 15-19, these claims correspond to the system and computer program product claims of claims 1-5 and are rejected using the analysis of claims 1-5 above.

Allowable Subject Matter

6. Claims 6-7, 13-14, and 20-21 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims, because the prior art does not appear to teach or suggest the generation of an aggregate instrumentation packet based upon simulation of the simulation model.

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Conclusion

7. The prior art made of record and not relied upon is considered pertinent to Applicants' disclosure. Reference to Dawson, U. S. Patent 6,782,503 is cited as teaching generating a signature to add to a test packet, using CRC calculations.

Reference to Dearth, U. S. Patent 6,345,242 is cited as teaching a synchronization mechanism for distributed hardware simulation.

Reference to Barton, U. S. Patent 6,101,604 is cited as teaching embedding authentication information within digital data.

Reference to Renaud, U. S. Patent 6,021,491 is cited as teaching creation of digital signatures for data streams including identifiers generated by CRC algorithms.

Reference to Page et al, "Web-Based Simulation: Revolution or Evolution," ACM Transactions on Modeling and Computer Simulation, Vol. 10 No. 1, pp. 3-17 (January 2000), is cited as providing a panel discussion of the nature of web-based simulation in terms of the fundamental aspects of simulation research and practice.

8. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Samuel Broda, whose telephone number is (571) 272-3709. The Examiner can normally be reached on Mondays through Fridays from 8:00 AM – 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Kevin Teska, can be reached at (571) 272-3716. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist, whose telephone number is (571) 272-2100.

A handwritten signature in black ink, appearing to read 'S. Broda'.

**SAMUEL BRODA, ESQ.
PRIMARY EXAMINER**